



SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS
Sample North Dakota Career Cluster Plan of Study
www.nd.gov/cte • www.careerclusters.org

Name _____
 School _____
 Date _____



SAMPLE OCCUPATIONS RELATING TO THIS CAREER CLUSTER	
Pathway	Occupations
SCIENCE & MATHEMATICS	Biological Technician • Biomedical Engineer • Chemical Technician • Chemical Engineer • Ecologist • Environmental Scientist and Specialist • Geologist • Mathematician • Math Teacher • Meteorologist • Science Teacher • Statistician • Zoologist
TECHNOLOGY & ENGINEERING	Architectural Drafting Technician • Aerospace Engineer • Architectural Engineer • CAD Technician • Civil Engineer • Computer Programmer • Construction Management Technician • Electrical Engineer • Mapping Technician • Network Engineer • Simulator Maintenance Technician • Survey Technician • Technology Education Teacher

SUGGESTED COURSE OF HIGH SCHOOL STUDY						
It is suggested that students consider appropriate dual credit, articulation, or advanced placement opportunities for postsecondary credit.						
English (four units required to graduate)	Math (two units required to graduate)	Science (two units required to graduate)	Social Studies (three units required to graduate)	Physical Education (one unit required to graduate)	North Dakota Career & Technical Education and Other Electives (one unit of foreign or Native American language, fine arts, or career and technical education required to graduate)	Additional Suggested Learning Opportunities
<input type="checkbox"/> English I <input type="checkbox"/> English II <input type="checkbox"/> English III <input type="checkbox"/> English IV <input type="checkbox"/> Technical Writing <input type="checkbox"/> Journalism	<input type="checkbox"/> Algebra I <input type="checkbox"/> Geometry <input type="checkbox"/> Algebra II <input type="checkbox"/> Pre-Calculus <input type="checkbox"/> Trigonometry <input type="checkbox"/> Statistics	<input type="checkbox"/> Physical Science <input type="checkbox"/> Biology <input type="checkbox"/> Chemistry <input type="checkbox"/> Physics <input type="checkbox"/> Advanced Biology	<input type="checkbox"/> World History <input type="checkbox"/> Psychology <input type="checkbox"/> U.S. History <input type="checkbox"/> Government <input type="checkbox"/> Economics	<input type="checkbox"/> Physical Education <input type="checkbox"/> Health	<input type="checkbox"/> Foundations of Technology <input type="checkbox"/> Engineering Technology <input type="checkbox"/> Technological Issues & Impacts <input type="checkbox"/> Advanced Design Applications <input type="checkbox"/> Advanced Technological Apps. <input type="checkbox"/> Intro to Engineering Design <input type="checkbox"/> Digital Electronics <input type="checkbox"/> Drafting Technology I & II <input type="checkbox"/> Foreign Language <input type="checkbox"/> Comp. Hardware & Operating Systems <input type="checkbox"/> Programming Essentials <input type="checkbox"/> Geographic Information Systems <input type="checkbox"/> Aviation Technology <input type="checkbox"/> Automated Systems Technology	School-Based: <input type="checkbox"/> TSA <input type="checkbox"/> Skills USA <input type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input type="checkbox"/> Job Shadowing <input type="checkbox"/> Service Learning Project Community-Based: <input type="checkbox"/> Mentorship <input type="checkbox"/> Volunteer <input type="checkbox"/> Part-time Employment

SAMPLE NORTH DAKOTA POSTSECONDARY PROGRAMS RELATED TO THIS CAREER CLUSTER			
Pathway	Associate Degree or Less	Bachelors Degree	Masters Degree or More
SCIENCE & MATHEMATICS	<input type="checkbox"/> Biological Technician and Technologist <input type="checkbox"/> Chemical Technician <input type="checkbox"/> Electrical Technician	<input type="checkbox"/> Atmospheric Sciences <input type="checkbox"/> Biotechnology <input type="checkbox"/> Earth/Environmental Science <input type="checkbox"/> Forensic Science <input type="checkbox"/> Geology <input type="checkbox"/> Math Education <input type="checkbox"/> Science Education <input type="checkbox"/> Statistics	<input type="checkbox"/> Mathematics <input type="checkbox"/> Biochemistry <input type="checkbox"/> Biology <input type="checkbox"/> Chemistry <input type="checkbox"/> Mathematics
TECHNOLOGY & ENGINEERING	<input type="checkbox"/> Architectural Drafting Technician <input type="checkbox"/> Construction Management Technician <input type="checkbox"/> Mapping Technician <input type="checkbox"/> Simulator Maintenance Technician <input type="checkbox"/> CAD Technician <input type="checkbox"/> Survey Technician	<input type="checkbox"/> Architecture <input type="checkbox"/> Civil Engineering <input type="checkbox"/> Electrical Engineering <input type="checkbox"/> Environmental Design <input type="checkbox"/> Computer Science/Programming <input type="checkbox"/> Technology Education	<input type="checkbox"/> Computer Engineering <input type="checkbox"/> Computer Programming <input type="checkbox"/> Manufacturing Engineering <input type="checkbox"/> Civil Engineering <input type="checkbox"/> Electrical Engineering <input type="checkbox"/> Technology Education